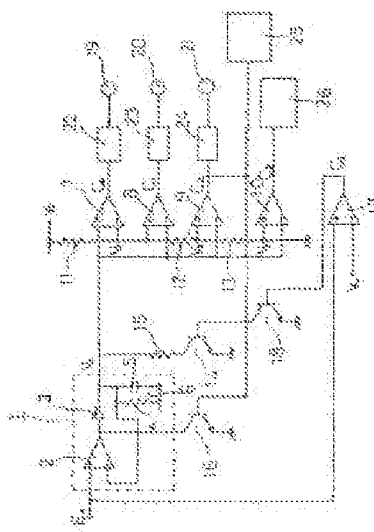


# POWER SOURCE VOLTAGE DETECTING CIRCUIT

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- international: **G01R19/165; G01R31/36; G05F1/56; H02H7/18; H02H7/20; G01R19/165; G01R31/36; G05F1/10; H02H7/18; H02H7/20;** (IPC1-7): G01R31/36; G05F1/56; H02H7/18; H02H7/20  
- european: G01R19/165G2B  
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## Abstract of JP 59022113 (A)

**PURPOSE:**To reduce external capacitors and pins in number by using one capacitor as a smoothing and holding and a delay capacitor in an equipment, such as a portable VTR, in which batteries are used as its power source. **CONSTITUTION:**When the output voltage V0 of the portable VTR, etc., using batteries as its power source drops belows a reference voltage V1 as the source voltage E0 of the batteries drops, a display element 20 turns on to indicate battery replacement, but if vioder recording is still carried on continuously, the output voltage V0 further drops below a reference voltage V2, placing the VTR in stop mode. Then, switching transistors 14 and 16 turn on, so input to a charging and discharging circuit 6 is intercepted to discharge the capacitor 5 to below an output voltage V3 a specific time later, cutting off the source voltage.



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